



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,554	04/27/2006	Massimo Sensini	72214	2736
23872 7590 01/23/2008 MCGLEW & TUTTLE, PC P.O. BOX 9227 SCARBOROUGH STATION SCARBOROUGH, NY 10510-9227			EXAMINER MILLER, SAMANTHA A	
			ART UNIT 3749	PAPER NUMBER
			MAIL DATE 01/23/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,554	Applicant(s) SENSINI, MASSIMO	
	Examiner Samantha A. Miller	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/8/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213:

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>DE 2702214 translation</u> . |

DETAILED ACTION

Response to Amendment

Receipt of applicant's amendment filed on 11/08/07 is acknowledged

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by KOSLOWSKI (DE 2702214 A). KOSLOWSKI teaches in the specification and Figs. 1-2 an invention in the same field of endeavor as applicant's invention that is described in the applicant's claims. For page and paragraph reference please refer to the enclosed English translation from the European Patent Office website.

KOSLOWSKI teaches:

1) Apparatus for the air circulation in double-glazed thermoinsulated walls, including at least an internal glass pane (4) and a external glass pane (5), said internal glass pane being positioned parallel to said external glass pane such that said internal glass pane and second external glass pane define a space (8), an air inlet opening (opening at 17 and 13, Fig.1) exclusively in communication with said space (as explained p.1 para.7 of the Description, "...depending upon the prevailing outside

temperature **either** the room air or outside air is introduced into the window interior".

This proves the inlets are selective, but perfectly capable of only the inlet opening to the interior to be open to the space between the panes.), said air inlet opening being located at the bottom of said internal pane of glass (Fig.1) (p.3 para.10-11); an air outlet opening (23), in communication with the outside environment and located at the top of said external glass pane (Fig.1); a tangential fan (22) of reduced size extending substantially the full length of one of the thermoinsulated walls (1), said tangential fan being located within a fan housing (21) (p.3 para.12-13 and p.4 para.1), defined at the top of said space, said tangential fan having a longitudinal opening (19) in communication with said space (Fig.1) , for air intake from the inside environment, said fan being actuated such that air flows from said inside environment exclusively through said inlet opening into said space and exits into said outside environment via said outlet opening, whereby said space has a temperature equal to a temperature of said inside environment (p.4 para.3 of the Description discuss the column of air being "temperature-neutral" which Examiner considers to be room temperature, further p.3 para.7 says that "as a rule either the outside of the internal (inlets) will however anyway be always locked", which means that when the outside inlet is closed only room temperature air is vented through as described on p.2 para.1).

2) The fan is suited to be driven at low rotational speed by an electrical motor drive fitted at an end of said housing (Fig.1, shows flap (25) in a open position while fan (22) is sucking air and air entering at (24) which means the motor of the fan must be running and a low speed).

3) Sensors detecting the hygrothermal conditions of the air (thermostat, p.2 para.7), suited to control the start of said electrical motor drive activating said fan (the thermostat is automatic and connected the ventilation fan sucking system, p.2 para.7 and p.4 para.2-4) (It is noted that since temperature is one of the conditions related to relative humidity, the thermostat senses the hygrothermal conditions).

4) The fan housing defines a fan outlet opening, said outlet opening being closed via a swinging closing member (25) for preventing air (from outside) from flowing back to the interior environment when said fan is not operative (Fig.1) (p.3 para.13-p.4 para.1).

5) The fan housing is defined by a substantially cylindrical sector (of box 48) shaped by a bearing element (Fig.2) provided, in assembled setting, with a longitudinal opening (19) turned to said space for the air intake through the space, and with an opposed opening (23) for the air outlet to the outside.

6) The bearing element (11) is removably constrained to a frame (3) (Fig.1) which is steadily fixed peripherally to one of said thermoinsulated walls (1).

7) The frame (3) is steadily fixed to a spacing means (36) fitted between said second external pane of glass and an intermediate pane of glass (Fig.2), said second external pane being parallel to the intermediate pane such that said second external pane and said intermediate pane define a room inside the space (Fig.1) (p.1 para.8), which is turned to the outside, for the insertion of a dimming element.

8) The frame (3) is provided with an opening (24) turned to the inside, at the top of said space, and with an opposite external hole (23) for the air outlet, said opening

and said external hole longitudinally extending to substantially the full length of the same frame (Fig.2)).

9) The opening turned to the inside of said frame is closed by a removable inspection door (6) said inspection door defining a lower groove for engaging an upper edge of said internal pane of glass by the interposition of a gasket means (glass (4) sealed by (6) exhibiting gasket means), said inspection door defining a curved portion (curved fingers of (6), Fig.1) for engaging a corresponding folded edge (bottom of 3, Fig.1) of the frame.

10) A modular covering element (32) is fitted externally to said frame (3) said modular covering element extending the full length of said thermoinsulated wall (1), said modular covering element defining a lower longitudinal opening (50) for the air outlet (Fig.2) (p.4 para.7).

11) The bearing element is constituted by a light metal section (p.4 para.11).

Regarding claims 12-20, please refer to the rejections of claims 1-11.

Response to Arguments

Applicant's arguments filed 11/8/2007 have been fully considered but they are not persuasive.

Applicant states that an English translation of DE 3828852 was provided, however DE 2702214 Koslowski was not provided. The record shows that both

translations were sent out on 7/10/2007 and scanned into out system, but another copy of the original translation has been again provided.

Applicant contends that Koslowski does not teach an inlet opening that is exclusively in communication with an inside house environment or air temperature within space (8) the same as the air temperature as the air temperature within the internal environment. However, the claims are afforded their broadest reasonable interpretation.

In this instant application claims 1 and 19 merely require an air inlet opening exclusively in communication with said space, for air intake from the inside environment, said fan being actuated such that air flows from said inside environment exclusively through said inlet opening into said space and exits into said outside environment via said outlet opening, whereby said space has a temperature equal to a temperature of said inside environment. It should be apparent that is the inlet being selective chosen to lock 18 and 14 and to open 17 and 13 only air that is coming into the apparatus is inside air exclusively and leaving the outlet exclusively, since only room temperature air is going through the apparatus then the air channel forming a space between the two glass panels has air temperature as the air temperature within the internal environment (Fig.1) (p.1 para.7, p.4 para.3, p.3 para.7, and p.2 para.1)

Applicant contends that Koslowski does not teach the speed of fan 22 is not controlled based on the hygrothermal conditions. However, the claims are afforded their broadest reasonable interpretation.

In this instant application claim 12 merely requires sensors detecting hygrothermal conditions of air, said electrical motor controlling a rotational speed of said tangential fan based on the hygrothermal conditions of said air sensed. It should be apparent that Koslowski teaches a thermostat (p.2 para.7) that senses the hygrothermal conditions (since temperature is one of the conditions related to relative humidity, the thermostat senses the hygrothermal conditions and it is mentioned that the detection of water determines if the outside air inlet is locked, p.3 para.7) of air the thermostat is automatic and connected the ventilation fan sucking system (p.2 para.7 and p.4 para.2-4) and at the very least turns on and off the electrical motor controlling a rotational speed by being on or off.

The rejection of claims 1-20 is deemed proper.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR '1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory

Application/Control Number:
10/595,554
Art Unit: 3749

Page 8


action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha A. Miller whose telephone number is 571-272-9967. The examiner can normally be reached on Monday - Thursday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samantha Miller
Examiner
Art Unit 3749
1/11/2008


STEVEN B. MCALLISTER
SUPERVISORY PATENT EXAMINER



Europäisches
Patentamt
European Patent
Office
Office européen
des brevets

Description of DE2702214

Print

Copy

Contact Us

Close

Result Page

Notice: This translation is produced by an automated process; it is intended only to make the technical content of the original document sufficiently clear in the target language. This service is not a replacement for professional translation services. The esp@cenet® Terms and Conditions of use are also applicable to the use of the translation tool and the results derived therefrom.

<RTI ID=4.1> VERBUNDFENSTER</RTI>

The invention concerns a double-glazed window, in particular for single or <RTI ID=4.2>Grossbräuräume, </RTI> with a window trim and/or a fodder framework, an outside and an inner wing and a sun protection arranged within the window interior present between the outside and inner wings, in particular Jalousette.

In particular wide <RTI ID=4.3>Bürohausfassaden, </RTI> the one multiplicity of windows exhibits, is suspended in the summer months of an intensive sun exposure. This sun exposure causes a rising <RTI of the ID=4.4>Rauminnentemperatur</RTI> to extremely high values, which are detrimental to the human well-being and thus make a stay in areas so heated up unreasonable. When remedy for this are already the most different kinds developed by <RTI ID=4.5>Sonnenschutzinrichtungen</RTI>, for example <RTI ID=4.6>Jalousetten</RTI> with horizontal or vertically running <RTI ID=4.7>La-</RTI> mellen, which is attached on the outside and/or insides of the windows. In addition in place of simply glassed windows such will preferably ensure ID=5.1>gesetzt with multiple glazing <RTI, </RTI> <RTI ID=5.2>ie</RTI> naturally a better lagging. In particular also double-glazed windows are used, with which between the window outside and inner wings Jalousetten are arranged, in order radiate here a refraction <RTI of the ID=5.3>Sonnen-</RTI> to reach, so that these cannot step unhindered into the space inside.

These measures did not prove however in many cases as sufficient, in order to prevent a considerable warming of the interior up, in particular during large window area and intensive sun exposure. One has in addition complex air conditioning systems installed, in order to roll over, if the heating of the room air cannot be switched off by the sun exposure, this accordingly and to cool, natural are expensive such plants. <RTI ID=5.4>Darüberhinaus</RTI> result to that extent problems, an additional installation of such air conditioning systems in building considerable build <RTI ID=5.5>liche</RTI> measures makes necessary, which cannot be predominantly accomplished partially for the most different reasons with older buildings at all <RTI ID=5.6>nehr</RTI>.

Regarding the thermic protection during the colder season windows represent weak points naturally opposite the walls. Here the tendency became generally accepted to replace thermic protection-technically insufficient single windows by double and <RTI ID=5.7>Dreifachfenster</RTI>. One can however also with such windows with <RTI ID=6.1>Mehrfachverglasung</RTI> still state that <RTI ID=6.2>nenschelbe</RTI> a considerable <RTI ID=6.3>Kältestrahlung</RTI> delivers in to the interior. <RTI ID=6.4>trotz</RTI> of the gegenüber single windows considerably improved isolation effect possess the interior disk at according to low outside temperatures still a substantially lower temperature than the room air of the interior, which brings a drop of temperature to the room air in the window zone with itself. This fact makes <RTI higher <RTI ID=6.6>Heizkasten</RTI> necessary for ID=6.5>naturymäss</RTI>.

▲ top The managing statements show that the well-known double-glazed windows do not exhibit warm ones and insulation for cold behavior optimal characteristics, and that therefore, in particular with areas with according to large <RTI ID=6.7>Fensterfläche, </RTI> for the maintenance of one as pleasantly <RTI ID=6.8>empfunden</RTI> ambient temperature additive <RTI ID=6.9>massnahmen</RTI> are for example higher Heizleistungslinien, installation of air conditioning systems <RTI ID=6.10>etc., </RTI> necessary, which are connected with according to high costs regarding it. Such costs could be avoided easily, if it succeeded to develop windows with an improved warming and/or <RTI ID=6.11>Kälteschitzverhalten</RTI>.

The invention is the basis the task, a double-glazed window with outstanding warming and/or to place insulation for cold characteristics to <RTI the ID=6.12>Verfugung</RTI> with which the disk of the inner wing exhibits one to the temperature of the room air <RTI ID=6.13>angeglichene</RTI> temperature.

This task according to invention with one <RTI ID=6.14>eingangs</RTI> described double-glazed windows thereby drawn that the window interior also in the lower trim part and/or <RTI ID=7.1>Futterrahmentell</RTI> vorge <RTI ID=7.2>seitene, </RTI> to the window interior and - exterior prominent <RTI ID=7.3>Lufteln-</RTI> footstep openings is provided and that the top side of the window interior with a ventilating system stands for this in connection, by means of which of the window interior or <RTI ID=7.4>-aussenseite</RTI> sucked in air is lead outable by the window interior to the interior and outside <RTI ID=7.5>flügel</RTI> along and at its top side.

With according to invention trained the double-glazed window becomes thus between the window interior and - outerwing window interior present ventilates, whereby depending upon the prevailing outside temperature either the room air or outside air is introduced into the window interior. Air penetrating at the lower surface of the interior ID=7.7>herauf</RTI> thereby becomes finally takes place one <RTI ID=7.8>fortwährende</RTI> <RTI ID=7.9>Umwälzung</RTI> of the air column present between the inner wing and the outerwing between the inner wing and <RTI the ID=7.6>Aussenflügel</RTI> into the upper range of the interior and at its top side <RTI, whereby in the summer <RTI ID=7.10>Sonnenstrahlungswärme</RTI> absorbed and in the winter cooling radiation is exhausted. At high outside temperatures, i.e. intensive Son <RTI ID=7.11>neneinstrahlung, </RTI> is sucked in therefore by the

ventilating system <RTI ID=7.12>kontinu-/RTI> lerlich colder outside air and exhausted upward over almost the entire <RTI ID=7.13>Fensterbreite</RTI>. In the window interior <RTI ID=7.14>somit</RTI> forms <RTI static air column, which can be warmed up by the sun exposure accordingly and this warmth to for ID=7.15>keine</RTI> the interior disk and thus the room air delivers. Rather the interior disk in <RTI the ID=7.16>grossen</RTI> and whole is kept temperature neutral, since they cool continuously with that relatively outside air in <RTI ID=7.17>Berührung</RTI> <RTI ID=7.18>kornint.</RTI> by the Sun arranged in the window interior uenschutz become unhindered passing through of the sunbeams the Fenster <RTI ID=8.1>vermieden, </RTI> so that according to invention made the ventilation of the window interior fully to the effect come, since straight <RTI ID=8.2>fm</RTI> range of the sun protection a strong heating up takes place, the sun protection radiate in strong measure the absorbed warmth on <RTI ID=8.3>die</RTI> <RTI ID=8.4>ihn</RTI> surrounding air column, thereby, <RTI ID=8.5>da</RTI> it continuously according to invention renewed and by cold outside air <RTI ID=8.6>ersetzt</RTI> <RTI ID=8.7>wird</RTI> this <RTI ID=8.8>Warme</RTI> not to the interior disk transferred <RTI ID=8.9>kinn.</RTI> the kind of the used sun protection does not play <RTI ID=8.10>fbr</RTI> <RTI the ID=8.11>flurcfilhrung</RTI> <RTI of the ID=8.12>Erfindung</RTI> a special role; for example can for this in particular dalousetten with Horizontallawellen to be used.

During <RTI ID=8.13>dr</RTI> <RTI ID=8.14>kalte</RTI> season sucks in vorgeehne the according to invention ventilating system by cn the Lufteltrittsöffnung warmed up room air leading to the window inside and ventilates thereby the window interior. <RTI ID=8.15>Damit</RTI> rolls over the cold air column developing between <RTI ID=8.16>Aussenflügel</RTI> and inner wing continuously and is always replaced by warmer room air. That has the consequence that of <RTI the ID=8.17>Scheibe</RTI> of the outerwing delivered Kältestrahlung cannot affect <RTI the ID=8.18>Scheibe</RTI> of the inner wing or only in very small <RTI ID=8.19>ng</RTI>, since the air column present between outside and Innenflägel is replaced continuously exchanged <RTI ID=8.20>tjnd</RTI> by warmer room air. The disk of the inner wing exhibits therefore also in the cold season one to the temperature of the room air <RTI ID=8.21>angeylichene</RTI> temperature, so that the interior disk radiates no more cold weather and the area present behind it fully be used can.

<RTI ID=9.1>zwischen</RTI> <RTI the ID=9.2>Aussenflügel</RTI> and the inner wing of the window a permanent Luftschleier is thus maintained according to invention, which consists ID=9.3>entw depending upon the prevailing outside temperature <RTI der</RTI> of cold outside air or <RTI ID=9.4>warmer</RTI> room air and thus: <RTI ID=9.5>flir</RTI> the arising warming and/or cooling radiation represents isolation and/or a neutralization zone, so that the disk <RTI of the ID=9.6>Innenflügels</RTI> remains essentially temperature neutral. According to invention out-arranged the window possesses one relatively <RTI ID=9.7>nied-</RTI> rige <RTI ID=9.8>Wärmedurchgangszahl</RTI> of approx. 0.3 <RTI ID=9.9>kcnl/m2</RTI> x h x oC.Es is clear, <RTI ID=9.10>dess</RTI> thereby in the cold season one <RTI ID=9.11>betrachtliche</RTI> saving of <RTI ID=9.12>Fleizkosten</RTI> is possible. <RTI ID=9.13>Zusätzlicl</RTI> to it lets obtain <RTI ID=9.14>sich</RTI> with your window a outstanding Schalldämeffekt.

A further advantage is to be seen in since by the existing sun protection in the warm season to a large extent <RTI a ID=9.15>bl will receive endfreies</RTI> daylight.

According to invention accomplished the ventilation window inside <RTI of the ID=9.16> of area brings it in addition t! ft t itself that room air is lerlich taken off kontinu-/RTI>, so that in final results a continuous regeneration of air in the area is obtained. That has the advantage that without the installation of a separate exhaust air system can be done. With a particularly preferred <RTI ID=9.17>Ausführungsform</RTI> this effect of the circulation of the room air is reached also if by the lower Lufteltrittsöffnung excluding outside air one sucks in. This execution form is characterised by the fact that the window interior is provided <RTI ID=9.18>desweltren</RTI> also in the upper trim part and/or, <RTI ID=9.19>ruterrahmentell</RTI> before seen Lufteltrittsöffnungen leading to the window inside. These <RTI ID=10.1>Eintri ttslffnungen</RTI> have the task to supply to the ventilating system a constant portion the ange <RTI ID=10.2>saugte</RTI> Gesamtluftmenge. <RTI ID=10.3>wo</RTI> that by that the ventilating system, supplied total amount of air a certain portion for the ventilation of the window area is only used.

Favourable way are so limited thereby the cross sections <RTI of the ID=10.4>Lufteln-</RTI> <RTI ID=10.5>tri ttsöffnungen</RTI> that about 50% that arranged <RTI the ID=10.6>Bel Uflunys-</RTI> plant <RTI ID=10.7>zuqeführten</RTI> amount of air from in the upper trim part <RTI the ID=10.8>ange-</RTI> and to the window inside <RTI to ID=10.9>führenden</RTI> Lufteltrittsöffnungen are due. With this execution form it is secured that <RTI ID=10.10>lmrer</RTI> a sufficient amount of air stands for the ventilating system to the en <RTI ID=10.11>fügung</RTI> and that also at sucking in of outside air by the lower Lufteltrittsöffnungen a circulation of the room air takes place.

The cross sections of the Lufteltrittsöffnungen planned in the lower trim part are in particular adjustable by means of slot slidegate valves. Such slot slidegate valves are arranged <RTI ID=10.12>vortejlhafterweise</RTI> on the exterior and the inside of the lower trim part and can be adjusted by hand or automatically, which can take place by means of a suitable, by means of thermostats of steered drive. The slot slidegate valves work parallel against each other, so that with the Uffnen slidegate valve the other one is closed in each case. The Lufteltrittsöffnungen leading arranged in the upper trim part to the window inside can be likewise with slot slidegate valves provided, which are generally only used however for it, around when turning <RTI the ID=10.13>Bel off rungsanlage</RTI> the Lufteltrittsöffnungen too <RTI ID=11.1>schli en.</RTI> with <RTI ID=11.2>normalem</RTI> enterprise, are it that outside air or room air is close-sucked, remain the upper Lufteltrittsöffnungen <RTI ID=11.3>ll: </RTI> general opened.

In order to avoid an excessive pollution of the window interior and the sun protection arranged there, the Lufteltrittsöffnungen planned in the lower trim part are forwards <RTI ID=11.4>tejlhafterweise</RTI> <RTI ID=11.5>mit</RTI> air cleaner mechanisms provided. As <RTI ID=11.6>soriders</RTI> simple <RTI ID=11.7>Lsng</RTI> for this proved thereby inserting a filter volume into the lower <RTI ID=11.8>Begrenzungsfläclle</RTI> of the window interior. This filter volume can become easily developed and <RTI ID=11.9>ggresslilt</RTI>. Outside air and room air occurs ID=11.11>etna</RTI> through in <RTI the ID=11.10>unteren</RTI> trim part <RTI horizontal to easily bent ausge <RTI ID=11.12>bilde</RTI>

Luft Eintrittsöffnungen, which lead into then a common <RTI ID=11.13>Vertikalkanal</RTI>, whose upper end with the filter volume, flowing into the window interior, is occupied.

<RTI ID=11.14>Für</RTI> the training of the ventilating system of the window according to invention offer themselves preferably two possibilities. To <RTI the ID=11.15>einen</RTI> each window <RTI ID=11.16>eine</RTI> can be assigned own Belüftungsanlage, whereby this roller exhaust appropriately vorgesehenen by one in the upper trim part is formed. This solution type is offered <RTI to if <RTI the ID=11.18>erfindungsgel, leave windows to ID=11.17>insbesondere</RTI> later into a building already existing is then built, since here small structural transformations at the building are to be made. On the other hand however the window interior knows also over appropriate air stream channels to a central ventilating system attached <RTI ID=11.19>sein</RTI> <RTI ID=11.20>die nur several windows für arranged is. This Lösungsmöglichkeit</RTI> offers itself in particular during the planning of buildings, which will provide with according to invention trained the windows are.

The space and/or outside air sucked in by the ventilating system can be delivered directly to the atmosphere, or be reconducted, how it offers itself in particular with central ventilating systems, in the cycle. During the arrangement one <RTI ID=12.1>Walzenlüfter</RTI> in the upper trim part one will appropriately deliver sucked in air <RTI ID=12.2>unmittelbar</RTI> to the atmosphere. In order to make this possible, the upper trim part at the window exterior is provided with <RTI ID=12.3>Luftabgabeffnungen</RTI>, which makes an air delivery possible to the outerwing neighbouring and parallel to it.

With this favourable arrangement it is thus possible, on the exterior of the outerwing for one <RTI ID=12.4>Dermanenten</RTI> air mentioned veil to maintain, which represents additionally to that managing/to effects a further warming and/or insulation for cold.

<RTI the ID=12.5>Walzenlüfterraum</RTI> and/or the air supply channels for the central ventilating system is preferably by means of flaps lockable, in order to prevent also with switched off ventilating system a penetration of outside air into the window interior and/or directly into the area of the building.

Particularly good results regarding warming and/or insulation for cold behavior were obtained with a window, with which the window outerwing is provided with a single glazing with a double glazing and the windows <RTI ID=12.6>Innenflügel</RTI>.

The Luft Eintrittsöffnungen leading arranged in the lower trim part to the window exterior are <RTI ID=13.1>zweckmässigerweise</RTI> more deeply <RTI ID=13.2>angeordnet</RTI> than those to <RTI the ID=13.3>Fensterinnenseite, </RTI> whereby those off <RTI ID=13.4>unngon</RTI> in a Vortikalkanal planned in the trim part flow, <RTI to ID=13.5>er</RTI> with the window interior in connection are located. By this special arrangement and/or arrangement the lower air inlet <RTI ID=13.6>öffnung</RTI> it is reached that the colder outside air, which is as well known heavier than the warmer room air can penetrate not by the internal Luft Eintrittsöffnungen into the building area and that the room air does not escape by äusseran the Luft Eintrittsöffnungen to the atmosphere. In addition the penetration of water becomes and/or. Condensate into the space inside prevents. As a rule either the outside or the internal Luft Eintrittsöffnungen will however anyway be always locked.

For the better elucidation the following detailed description of preferential execution forms serves the invention the same in connection with the attached design of the Fig. 1 <RTI ID=13.7>einen</RTI> vertical cut by one <RTI ID=13.8>Ausführungsform</RTI> one <RTI ID=13.9>erfindungsgemäss</RTI> trained <RTI ID=13.10>Verbundfenstere</RTI> shows; Fig. 2 a further execution form <RTI of the ID=13.11>erfindungsg.mäss</RTI> <RTI ID=13.12>ausge-</RTI> stalteten window in more cut <RTI ID=13.13>pörspektivischer</RTI> Opinion shows; and Fig. 3 in Fig. 2 windows shown in more cut <RTI ID=13.14>perpek-</RTI> <RTI ID=13.15>tivischor</RTI> opinion without inserted <RTI ID=13.16>Valseinlüfter</RTI> <RTI ID=13.17>darstellt.</RTI>

In Fig. 1 is represented an execution form according to invention of the D of trained double-glazed window in the vertical cut.

The window shown 1 is inserted to ID=14.1>Stierz</RTI> 11 between a parapet wall 12 and one <RTI and points a window trim and/or a one <RTI to ID=14.2>Futterrahnlen, </RTI> from that and/or that the lower trim and/or fodder <RTI ID=14.3>rahmenteil</RTI> 2 and the upper trim and/or <RTI ID=14.4>Futterrahmenteil</RTI> 3 is shown, as well as an inner wing 4 and an outerwing 5 up. <RTI the ID=14.5>Sckabe</RTI> of the respective wing is set in in a wing framework 6 and/or 7, which is fastened to the trim and/or the fodder framework in an appropriate way.

Like one Fig. 1 furthermore to infer can lead, is in the lower trim part 2 Luft Eintrittsöffnungen 13, 14 arranged, both to the window exterior, i.e. to <RTI the ID=14.6>Atmosphäre, als</RTI> also to the window inside, i.e. into the space inside. One recognizes that here to the window exterior <RTI the ID=14.7>fübenden</RTI> of air inlet openings 14 is more deeply arranged than those to the window inside. The Luft Eintrittsöffnungen flow into a common vertical channel 15, which is arranged within the lower trim part of 2 and in between inner wings the 4 and <RTI ID=14.8>Aussenflügel</RTI> 5 window interior present 8 leads into. The vertical channel 15 is taken off by a suitable filter volume 16, in order to prevent the penetration of dirt particles into the window interior. The Luft Eintrittsöffnungen 13, 14 are provided on the exterior with suitable Schiltzschlebern 17, 18.

Within the window interior 8 a sun protection is arranged in form of a Jalousette 9, those in Fig. 1 is shown in the let down condition. The Jalousette can be pulled together naturally easily, so that she is then at the top margin of the window interior. The upper trim part of 3 is trained essentially hollow and stands over passage off now towards and/or a passage slot 24 with <RTI the ID=16.1>enstarinnenc</RTI> area 8 in connection. Also the upper trim part of 3 is provided on its inside with a Luft Eintrittsöffnung 19, which is likewise <RTI ID=16.2>mll</RTI> a suitable slot slidegate valve 20 equipped.

Into that the window exterior <RTI a ID=16.4>Lüfterkastevl</RTI> 21 is used turned range of the hollow of area of the upper <RTI ID=16.3>Zagentells</RTI> 3; in which a suitable roller exhaust 22 with horizontal wave is. The box exhibits

25 provided <RTI ID=16.5>Uffnung</RTI>, by which the exhaust 22 air sucks in on its inside with a flap, as in the following still in the detail is described. Sucked in air is exhausted over air delivery openings 23, which make the delivery of air in parallel direction for 5 possible to <RTI the ID=16.6>Aussenflügel</RTI> neighbouring arranged sind.und to this, directly to the atmosphere.

For the enterprise of the window one differentiates two <RTI ID=16.7>Hauptfälle: </RTI> summer operation and winter operation. With summer operation, with which by intensive sun exposure <RTI ID=16.8>wärme</RTI> produced to be exhausted is, the Luftintrittsöffnungen, 14 leading in the lower trim part 2 to the window exterior are opened, while the entrance openings 13 leading to the inside are closed. The Luftintrittsöffnungen 19 planned in the upper trim part 3 are likewise opened. The Jalousette 9 is <RTI ID=16.9>heruntergelassen, </RTI> sets one now the roller exhaust 22 in Betrieb, then this sucks in over the upper Luftintrittsöffnungen 19 and the lower Luftintrittsöffnungen 14 room air and outside air. Colder outside air is introduced over the vertical channel 15 into the window interior 8, slides along the inner wing 4 and outerwing 5 along upward and arrived by <RTI the ID=17.1>Uffnung</RTI> 24 into the cavity of the upper trim part of 3. There it mixes with <RTI the ID=17.2>Raum-</RTI> occurring by the Uffnung 19 air and finally arrives themselves into the exhaust box 21, by which it is supplied by way of the delivery openings 23 of the atmosphere.

In this way the air column which is within the window interior is permanently rolled over and replaced by colder outside air, so that will maintain a relatively temperature-neutral Innenschelbe can. By the delivery openings 23 the withdrawing, now something <RTI ID=17.3>erwärmte</RTI> air slides as Luftschleier along the exterior <RTI of the ID=17.4>Aussenflügels</RTI> along and represents thus an additional thermic protection against the existing sun exposure.

In the winter operation that is slot ski rather 18 of the Luftintrittsöffnungen 14 leading to the window exterior locked, so that exclusively by the entrance openings 13 room air is sucked in. This relatively warm room air arrived into the window interior 8, flows upward and in the same way as managing described to the atmosphere is finally transferred. Also here becomes through. the permanent wake of relatively warm room air the window interior disk held on one approximately by the room air <RTI ID=17.5>angeglichenen Temperatur</RTI>, so that the window radiates inward no more cold weather.

The cross sections <RTI of the ID=17.6>Luftintrittsbffnungen</RTI> in the lower and upper trim part are so limited that <RTI the ID=17.7>Lüfteretwa</RTI> extracts 50 X of the total amount of air by the upper <RTI ID=18.1>Luftintrittsöffnungen</RTI> 19 <RTI ID=18.2>unrüttelbar</RTI> the area, while the remaining 50 X from the lower Luftintrittsöffnungen are due and serve for the ventilation of the window interior.

In Fig. 2 is structurally somewhat an amended execution form one <RTI ID=18.3>erfindungsgemäss</RTI> out-arranged <RTI ID=18.4>Merkbundenfensters</RTI> in more cut <RTI ID=18.5>perspektivischer</RTI> opinion shown. The window 30 is provided with a window trim and/or a fodder framework and an inner wing 33 and one <RTI ID=18.6>Aussenflügel</RTI> 34. The disk <RTI of the ID=18.7>Innenflügels</RTI> 33 is fastened over a wing framework 35 to the fodder framework. The Außenflügel is provided contrary to the before described execution form with a double glazing, which is fastened to the window trim over a wing framework 36.

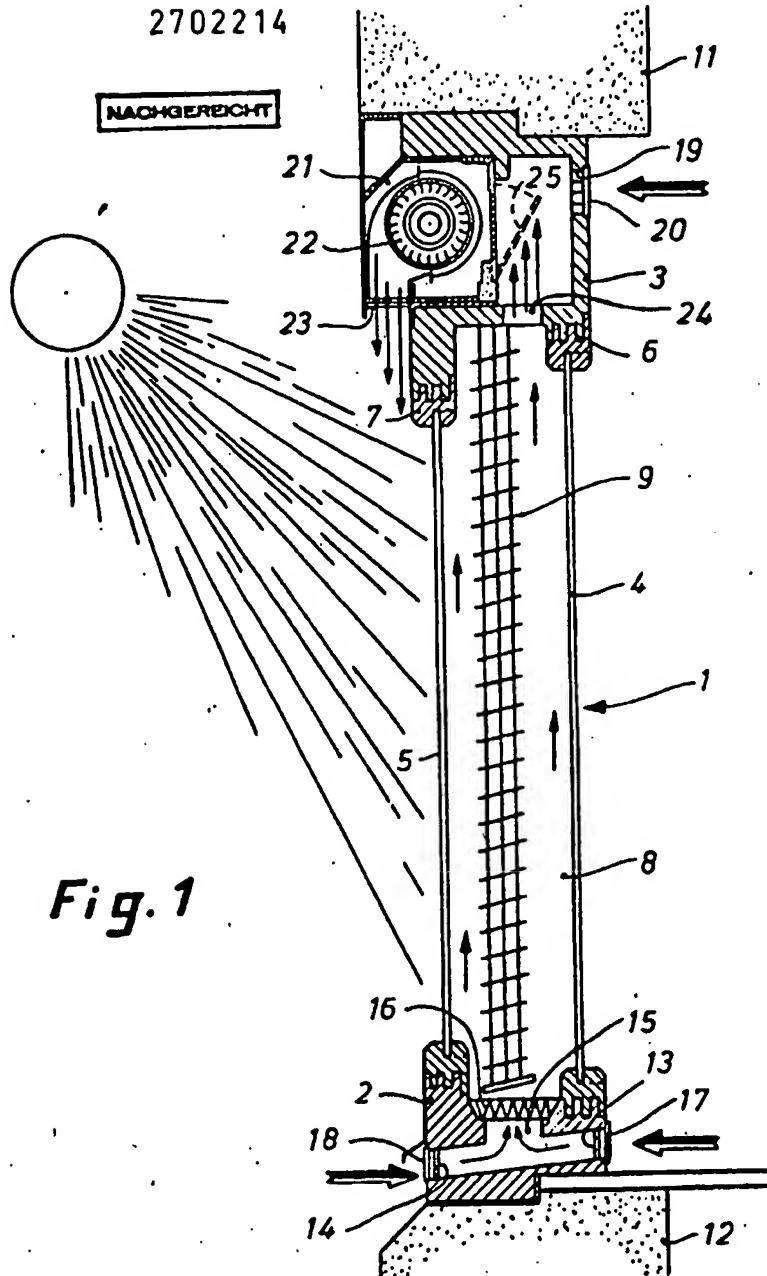
In the lower trim part of 31 Luftintrittsöffnungen are 39 and 40 intended, which flow into a common vertical channel 41, more cler <RTI ID=18.8>liber</RTI> <RTI a ID=18.9>Filterband</RTI> 44 with the window interior 37 in connection stand. The Uffnungen 39 and 40 is equipped with suitable slot slidegate valves 42 and 43, in order to be able to adjust their entrance cross sections. In the window interior 37 a suitable Jalousette 38 is arranged, which is shown in Fig.2 in <RTI the ID=18.10>zusammengezogenen</RTI> condition. The window interior stands over depressing openings 47 with one-acts like upper trim part of 32 for intended cavity in <RTI ID=18.11>Verbindung > in</RTI> to window inside leading Luftintrittsöffnungen 45, which are provided with a suitable slot slidegate valve 46, flows. In the outside range <RTI of the ID=18.12>Iluhlaules</RTI> an exhaust box 48 is arranged, in <RTI ID=19.1>dem</RTI> <RTI a ID=19.2>Walzenlüfter</RTI> 49 is. <RTI the ID=19.3>Walzenlüfter</RTI> 49 supplies sucked in air over air delivery openings 50 <RTI the ID=19.4>Atmosphäre</RTI>.

In Fig. 2 represented windows functions in the same way as in Fig. 1 shown.

Fig. 3 shows in Fig. 2 represented windows, whereby only <RTI the ID=19.5>Walzenlüfter</RTI> is not represented. In place of the exhaust the free space 60 formed thereby knows for example as air supply channel for a central ventilating system used who <RTI ID=19.6>den, </RTI> several windows is common. Otherwise arise into <RTI the ID=19.7>Funktionsweise</RTI> no differences to that managing described designs.

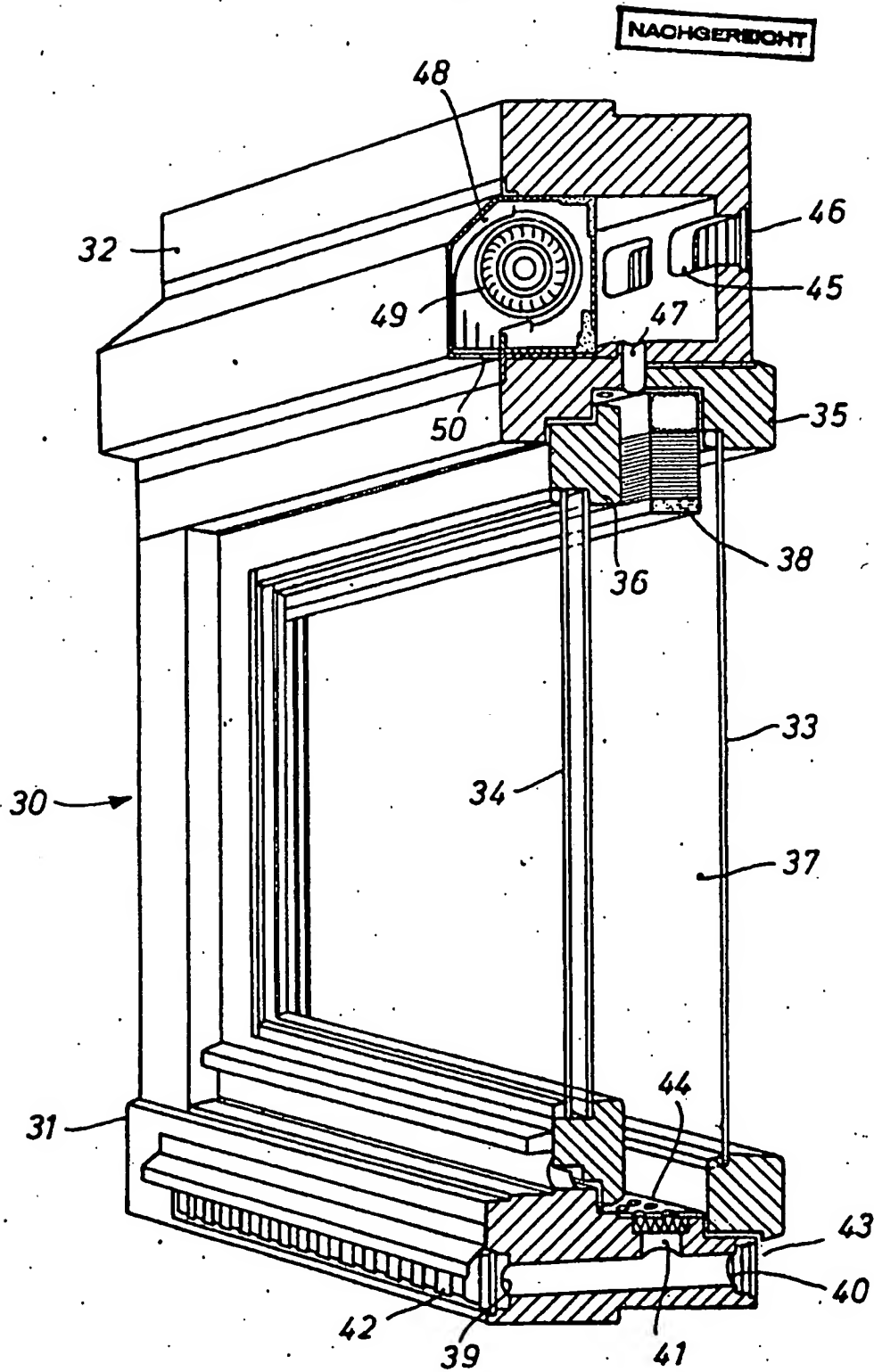
<RTI the ID=19.8>erfindungsgemäss</RTI> out-arranged windows made can of the Bfaustoffen well-known for it <RTI ID=19.9>Ilool z, </RTI> metal and plastic <RTI ID=19.10>wcrdrn.</RTI> natural can if necessary also the window inner wing <RTI ID=19.11>mit</RTI> of a double glazing be equipped.

Le e r His Excellency l t e



809830/0121

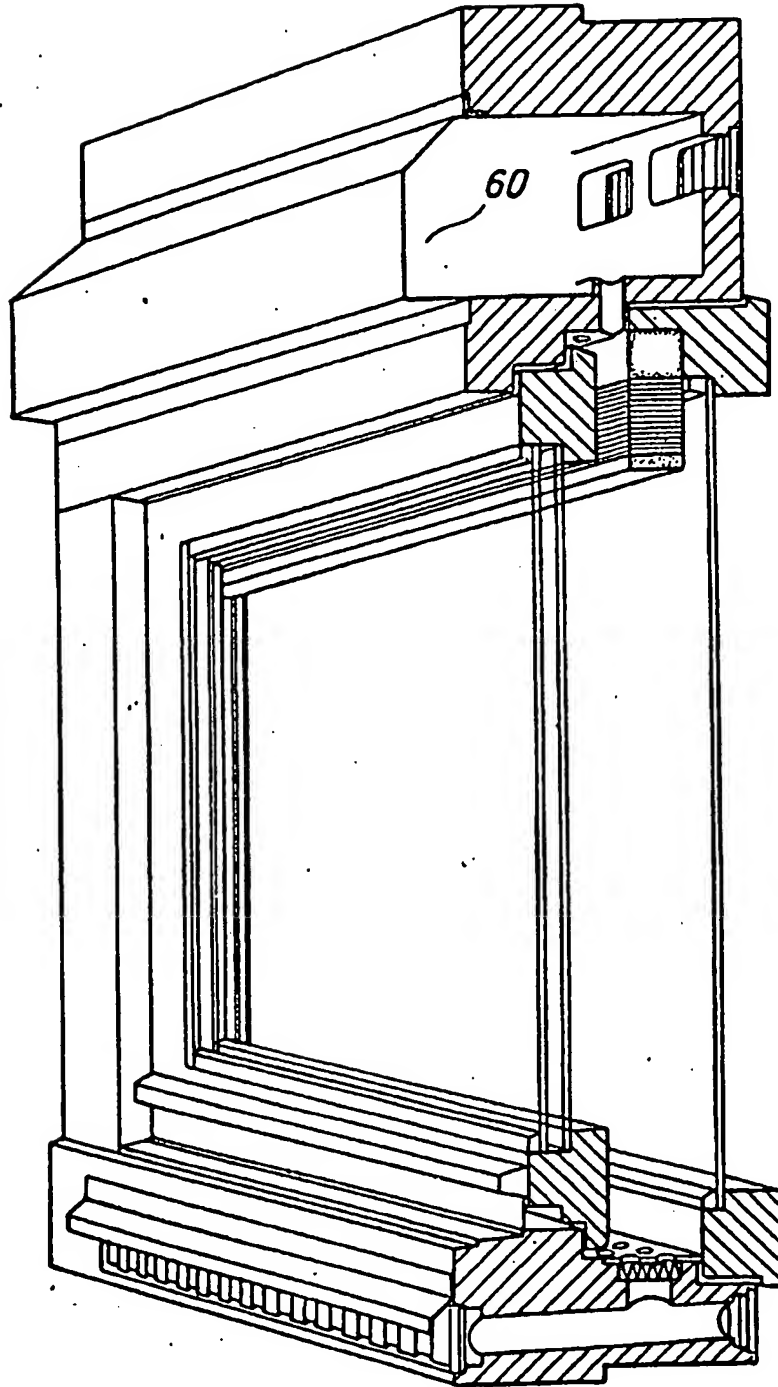
Fig. 2



809830/0121

Fig. 3

NACHGERECHT



809830/0121.